

TABLE C–1.—DEFINITION OF OPERATING LOAD RANGES FOR LOAD-BASED SUBSTITUTION DATA PROCEDURES—Continued

Operating load range	Percent of maximum hourly gross load (%)
2 .....	10–20
3 .....	20–30
4 .....	30–40
5 .....	40–50
6 .....	50–60
7 .....	60–70
8 .....	70–80
9 .....	80–90
10 .....	90–100

2.2.2 Beginning with the first hour of unit operation after installation and certification of the flow monitor or the NO<sub>x</sub> continuous emission monitoring system, for each hour of unit operation record a number, 1 through 10 (or 1 through 20 for flow at common stacks), that identifies the operating load range corresponding to the integrated hourly gross load of the unit(s) recorded for each unit operating hour.

2.2.3 Beginning with the first hour of unit operation after installation and certification of the flow monitor or the NO<sub>x</sub> continuous emission monitoring system and continuing thereafter, the data acquisition and handling system must be capable of calculating and recording the following information for each unit operating hour of missing flow or NO<sub>x</sub> data within each identified load range during the shorter of: (1) the previous 2,160 quality assured monitor operating hours (on a rolling basis), or (2) all previous quality assured monitor operating hours.

2.2.3.1 Average of the hourly flow rates reported by a flow monitor, in scfh.

2.2.3.2 The 90th percentile value of hourly flow rates, in scfh.

2.2.3.3 The 95th percentile value of hourly flow rates, in scfh.

2.2.3.4 The maximum value of hourly flow rates, in scfh.

2.2.3.5 Average of the hourly NO<sub>x</sub> emission rate, in lb/mmBtu, reported by a NO<sub>x</sub> continuous emission monitoring system.

2.2.3.6 The 90th percentile value of hourly NO<sub>x</sub> emission rates, in lb/mmBtu.

2.2.3.7 The 95th percentile value of hourly NO<sub>x</sub> emission rates, in lb/mmBtu.

2.2.3.8 The maximum value of hourly NO<sub>x</sub> emission rates, in lb/mmBtu.

2.2.4 Calculate all monitor or continuous emission monitoring system data averages, maximum values, and percentile values determined by this procedure using bias adjusted values in the load ranges.

2.2.5 When a bias adjustment is necessary for the flow monitor and/or the NO<sub>x</sub> continuous emission monitoring system, apply the adjustment factor to all monitor or continuous

emission monitoring system data values placed in the load ranges.

2.2.6 Use the calculated monitor or monitoring system data averages, maximum values, and percentile values to substitute for missing flow rate and NO<sub>x</sub> emission rate data according to the procedures in subpart D of this part.

[58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26547, 26548, May 17, 1995]

## APPENDIX D TO PART 75—OPTIONAL SO<sub>2</sub> EMISSIONS DATA PROTOCOL FOR GAS-FIRED AND OIL-FIRED UNITS

### 1. APPLICABILITY

1.1 This protocol may be used in lieu of continuous SO<sub>2</sub> pollutant concentration and flow monitors for the purpose of determining hourly SO<sub>2</sub> emissions and heat input from: (1) gas-fired units as defined in §72.2 of this chapter; or (2) oil-fired units as defined in §72.2 of this chapter. This optional SO<sub>2</sub> emissions data protocol contains procedures for conducting oil sampling and analysis in section 2.2 of this appendix; the procedures for flow proportional oil sampling and the procedures for manual daily oil sampling may be used for any gas-fired unit or oil-fired unit. In addition, this optional SO<sub>2</sub> emissions data protocol contains two procedures for determining SO<sub>2</sub> emissions due to the combustion of gaseous fuels; these two procedures may be used for any gas-fired unit or oil-fired unit.

1.2 Pursuant to the procedures in §75.20, complete all testing requirements to certify use of this protocol in lieu of a flow monitor and an SO<sub>2</sub> continuous emission monitoring system. Complete all testing requirements no later than the applicable deadline specified in §75.4. Apply to the Administrator for initial certification to use this protocol no later than 45 days after the completion of all certification tests. Whenever the monitoring method is to be changed, reapply to the Administrator for recertification of the new monitoring method.

### 2. PROCEDURE

#### 2.1 Flowmeter Measurements

For each hour when the unit is combusting fuel, measure and record the flow of fuel combusted by the unit, except as provided for gas in section 2.1.4 of this appendix. Measure the flow of fuel with an in-line fuel flowmeter and automatically record the data with a data acquisition and handling system, except as provided in section 2.1.4 of this appendix.

2.1.1 Measure the flow of each fuel entering and being combusted by the unit. If a portion of the flow is diverted from the unit without being burned, and that diversion occurs downstream of the fuel flowmeter, an